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The paradoxical self: Awareness, solipsism and first-rank symptoms in schizophrenia

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ABSTRACT

Schizophrenia as a pathology of self-awareness has attracted much attention from philosophical theorists and empirical scientists alike. I view schizophrenia as a basic self-disturbance leading to a lifeworld of solipsism adopted by the sufferer and explain how this adoption takes place, which then manifests in ways such as first-rank psychotic symptoms. I then discuss the relationships between these symptoms, not as isolated mental events, but as end-products of a loss of agency and ownership, and argue that symptoms like thought insertion and other ego-boundary disorders are by nature a multitude of paradoxes created by a fragmented awareness. I argue that such fragmentation does not always require or lead to a delusional elaboration as the definitive feature of its phenomenology, and present reasons for the role of the first-person pronoun as a mere metaphor used to represent the patient's bizarre experiences where sensory perception and thinking processes converge. Further, I discuss the initial benefits of adopting a solipsistic stance and how despite being a maladaptive strategy, it nevertheless acts as a protective barrier for the integrity of one's self. Lastly, I offer some suggestions for clinical practice, emphasizing the importance of understanding the patient's suffering in any therapeutic alliance.

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1. Introduction

Schizophrenia has been the focus of a tremendous amount of theoretical and empirical research since its name was first coined by Swiss psychiatrist Eugen Bleuler over one hundred years ago. Originally termed “dementia praecox,” it was first thought to be a chronic neurodegenerative disorder following an inevitably deteriorating course (Ashe, Berry, & Boulton, 2001; Lieberman, 1999), although more recently the notion of chronicity and deterioration has been challenged by clinicians, researchers, and patients alike (Zipursky, Reilly, & Murray, 2013).

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Nevertheless, more often than not schizophrenia still has a devastating impact on the patient and leads to great pain and suffering, whether it is in the form of an acute psychotic episode or long-term disabilities. As a result, the importance of schizophrenia research cannot be underestimated.

There are several prominent theories about the nature and pathogenesis of schizophrenia ranging from the biochemical to the philosophical. However, what are thought to be the hallmarks of schizophrenia (delusions and hallucinations, i.e., reality distortions) in the current diagnostic systems bear little resemblance to its original clinical core (Parnas, 2011), which converges toward a basic and fundamental change in one's experiences of the self (and also, subsequently, the world). Even more fundamental to the experience of one's self is the minimal awareness of one's conscious cognitive state (Cermolacce, Naudin, & Parnas, 2007; Sass & Parnas, 2003), thoughts, and actions, as these are undoubtedly the prerequisites to constructing a more sophisticated identity. It is in this theoretical framework that I put forward an account of schizophrenia as fundamentally a pathology of self-awareness, in which the paradoxes caused by such pathology in turn create the first-rank psychotic symptoms and lead to reality distortions as secondary consequences, rather than primary manifestations, of the disorder.

The primary manifestations of schizophrenia, in my opinion, and as are compatible with many other theorists' views (e.g., Sass & Parnas, 2003), are basic self-disturbances leading to the adoption of a solipsistic lifeworld that provides fertile ground for the development of psychotic phenomena such as first-rank symptoms. This paper aims to provide an integrated account of the structure of self-disorders found in schizophrenia and shed further light on the issues of paradoxicality and solipsism which are often overlooked or ignored in the clinic. In particular, I hope to contribute to deciphering the puzzle of how a patient adopts a solipsistic stance in the first place. Given the benefits of applying phenomenological theories to actual clinical practice (Škodlar, Henriksen, Sass, Nelson, & Parnas, 2013), such an analysis is necessary for, and beneficial to, the current debates about the nature of self-awareness in schizophrenia, as it can lead to further phenomenological insights and implications for both research and therapeutic advances.

2. Schizophrenia as a self-disturbance

Schizophrenia is far from a homogenous entity: from individuals' levels of functioning to the myriad of symptoms any given individual could experience, diagnostically speaking at least, there is no overwhelming consensus on what its true "pathognomonic" features are. Indeed, due to this heterogeneity, two individuals could receive the same diagnosis of schizophrenia with absolutely no overlap in symptoms. Further, it is extremely difficult to predict future onset of schizophrenia based on observations of early psychosis symptoms; even in individuals at clinical high risk (for example, those displaying signs of attenuated positive symptoms, i.e., delusional ideation and hallucinations) the actual "transition" rate to a psychotic

disorder is approximately 30% (Fusar-Poli et al., 2012). The search for a predictive “marker,” therefore, has significant diagnostic value and strong implications for early intervention.

Of all the hopeful candidates for such a marker, self-disturbances within the schizophrenia spectrum have recently attracted a great deal of interest, especially after empirical studies’ support of its predictive value for identifying transition to full-blown psychosis in those at risk, as well as for discriminating schizophrenia-spectrum disorders from other mental disorders (e.g., Nelson, Thompson, & Yung, 2012; Nordgaard & Parnas, 2014; Parnas et al., 2011). Such empirical studies have mostly employed detailed phenomenological interviews, with the Examination of Anomalous Self-Experience (EASE; Parnas et al., 2005) as the most prominent example (for a detailed review on studies using the EASE and other scales, see Parnas & Henriksen, 2014).

The notion of schizophrenia as a self-disorder is not new, however, with its roots traced to at least Jaspers if not Kraepelin (with his famous “orchestra without a conductor” analogy), and other phenomenologically minded continental European psychopathologists such as Minkowski, Blankenburg, and Conrad. Schizophrenia at its core, they argued, consists of “a basic alteration of self-consciousness” (Hur, Kwon, Lee, & Park, 2014). Contemporary theorists have further disentangled such an alteration (“*ipseity* disturbance,” from Latin *ipse* – “self”) into a combination of factors termed “hyperreflexivity” and “diminished self-affection” (e.g., Sass & Parnas, 2003), a dominant theory which has guided many others’ pursuits in this matter.

According to Sass and Parnas (2003, p. 429), *ipseity* is the most fundamental, pre-reflective and vital level of the broadly defined “sense of self” and concerns the “experiential sense of being a vital and self-identical subject of experience or first person perspective on the world,” which is tacit and property-less, but forms the very foundation of other more complex levels of the self (such as the “narrative self” or “reflective self,” which is constructed as a second “layer” of selfhood over minimal self and is heavily influenced by social and interpersonal values). It is this level of selfhood that is severely disrupted in schizophrenia, as opposed to the identity-based or narrative self which is often affected in borderline personality disorder while leaving *ipseity* intact. For example, Nelson and colleagues (Nelson, Thompson, Chanen, Amminger, & Yung, 2013) found no relationship between EASE scores and borderline pathology. Within *ipseity*-disturbances, hyperreflexivity is defined as “exaggerated self-consciousness involving self-alienation,” whereas the aspect of diminished self-affection is defined as “diminished intensity or vitality of one’s own subjective self-presence.” Together with the aspect of a disrupted grip or “hold” on the external world, they form the central point around which anomalies in self-experience revolve: in their 2003 paper, Sass and Parnas clearly state that “schizophrenia ... is a self-disorder or, more specifically, an *ipseity* disturbance in which one finds certain characteristic distortions of the *act of awareness*” (p. 428, emphasis added).

But these “characteristic distortions” are undoubtedly paradoxical in nature. In hyperreflexivity, internal mental events become so absorbing and attention-grabbing that one fully immerses oneself in the experiences at the cost of quite literally “losing oneself within oneself” – that is, relinquishing one’s position as the experiencer and becoming merged with the subjective experience itself, hence the self-alienation despite heightened self-consciousness. This loss of one’s experiential position in turn contributes to the diminished sense of presence because one is no longer an active *agent* in charge of what one experiences, but a passive *target* of any experience one’s mind creates. This combination of heightened self-consciousness and severe disruptions in agency is a core feature in schizophrenic self-disturbances: a consciousness so salient that it detaches from one’s subjective experiential field and gains a foreign quality, that is, an awareness that is “hyper-real” (van Duppen, 2016). Although it may be too strong to state that the sense of agency completely disappears in schizophrenia, it is at least heavily damaged. Hyperreflexivity and diminished self-affection feed into each other and the end result is often a shattered sense of self, unable to maintain a hold or “grip” over either one’s internal mental states or external perceptions.

Indeed, what is left is nothing but a mere shadow of one’s own ipseity. When self-consciousness loses vitality and the most basic, taken-for-granted “mineness” (i.e., the given property that anything *I* experience is *my* experience) of subjectivity, can it even be called an “awareness” anymore? Yet still, the entire focus of one’s existence is transferred to the field of experience at the same time, creating an illusory reality that is *more* “real” than what one may call “consensual reality.” I say this because in consensual reality, experience is imbued with a given basicness and the components of this reality do not always surface to the level of conscious scrutiny (for example, one can easily filter out irrelevant background noise and not focus on every little sensory detail in the environment), whereas in a hyperreflexive reality all experiences come to the forefront of awareness (a good example is the rapid escalation of the vividness of normally tacit thought processes, to the extent they become near-sensory) while robbing the individual of the ability to construct a coherent representation of the same events, internally and externally. Even one’s capacity to act intentionally appears foreign to the self, but is experienced as an extremely powerful outside force which one cannot possibly resist. The patient with schizophrenia is therefore perpetually trapped in a cognitive cul-de-sac, unable to navigate through the “realities” overwhelming their self-awareness while shaping the same awareness.

The self-disorder approach, in addition, is far from just theoretical speculation with little “real-life” supporting evidence. Apart from clinical studies’ increasing adoption of this approach (see the review by Parnas & Henriksen, 2014; mentioned above), emerging neurobiological theories (Mishara et al., 2016) and recent empirical studies on neurophysiology (Sestito, Parnas, Maggini, & Gallese, 2017; Sestito et al., 2015), the notion of a fragmented self is also heavily reflected in first-person accounts of schizophrenia-spectrum psychoses (Humpston & Broome, 2016b; Payne, 2012).

It therefore has the advantage of bringing a sense of validity and trueness to the experiences of patients with schizophrenia despite being fundamentally abstract and amorphous concepts. Their constant search for meaning in-between “realities” would certainly resonate with many phenomenologically-minded theorists as well as those with personal histories of psychosis, some of whom in the latter group have studied neuroscience themselves (Hawkes, 2012; Johnson, 2013; Vitasola, 2013).

This subjective experience is, first and foremost, a painfully confusing one. For those afflicted with schizophrenia, self-consciousness may seem to be an object of detached observation rather than a coherent subjectivity situated in the real world and imbued with tangible meaning. This loss of meaning may relate to the disembodiment account of psychosis (Stanghellini, 2009), where the self is reduced to a deanimated body and a disembodied spirit (p. 58) and the commonsensical “grasp” of everyday meanings is lost in quite a literal sense. In any case, it is impossible to be *a part of* a certain consciousness while observing the same consciousness *from the external*; in other words, the first-person perspective cannot be both the object and the subject simultaneously. Just as Stanghellini (2009) points out, “this radical dualism between a subject who’s thinking and an object that is conceived ... pure consciousness and pure materialness” (p. 58) signifies the mere theoretical nature of schizophrenic awareness. It is, once again, an irreconcilable paradox. But this paradox must be resolved, even superficially, otherwise it will pose an even greater danger to what is already a fragile ipseity.

For the individual with schizophrenia, perhaps, the only solution to this paradox is to let go of logical and physical boundaries of the corporeal world and isolate oneself in a “world” made of thoughts alone. If there is no external boundary between self and other, if physical entities are simply simulated by thoughts, then everything can be brought back under control. In other words, the patient with schizophrenia takes up the existential position of a solipsist (Parnas & Sass, 2001) as a response to the overwhelming and persistent sense of entrapment caused by the constant bombardment of incoming information. But such a solipsistic position can only lead to further, more severe entrapment – this time in a labyrinth of thoughts with very little room to navigate or escape. The question is about whether this is a willful adoption or some kind of involuntary retreat into one’s inner world, and I aim to point toward some potential answers to this question, which is currently unanswered by the self-disorder framework.

3. The minimally aware solipsist

The life of a solipsist is by definition a lonely one (its etymology comes from Latin *solus*, “alone”, and *ipse*, “self” as in *ipseity*). Whether the concept of solipsism is a metaphysical (“only I and my mind exist”) or an epistemological one (“only the knowledge gained from my mind can be truly known” [Henriksen, 2013]), the self inevitably takes central stage – or should I say, the self *is* the central stage – of all thought and perception. Even the demarcation between self and other dissolves;

what is the meaning in others when your own self encompasses all existence already? From more than one perspective, the individual with schizophrenia is minimally aware, let alone in control, of one's own ipseity, despite being quite literally "the center of the world." Gerrans (2014) artfully summarizes the schizophrenic life-world in his book *Measures of Madness* as follows:

The schizophrenic attends, with special absorption, to experience itself. For the schizophrenic, experience becomes detached from its normal role in mediating encounters with the world and becomes, so to speak, the world – not in an ontological but a *practical sense* ... given that there is nothing in the solipsist's world but her own thoughts, agency is reduced to nothing other than the flow of mental events ... she [the solipsist] is all-powerful, but in a virtual world – which is to say, in another sense, in no world at all. All the solipsist does is *watch herself thinking*. The result is a kind of *omnipotent passivity*. (pp. 214–215, emphasis added)

To add validity to the account of solipsism and of losing control over one's thinking processes, Payne poignantly describes her own experiences of schizophrenia:

Here is a related conundrum: are you in control of your own thoughts? It sounds like a very odd question, but it's at the core of the experience of schizophrenia. A dying person who is normal, even a person in front of a firing squad, has choices. A psychotic person is less, even minimally, in control of his thoughts. (2012, p. 899)

Whether from Gerrans' academic point of view or Payne's personal narrative, it should be clear that the patient with schizophrenia as a solipsist faces the unavoidable consequences of (apparently) gaining control of the external world and losing the same control over one's internal thoughts. From Payne's account, she states that even a person who is about to die, provided they are "normal," has choices, but the psychotic person does not. However, perhaps the choice has already been made for the psychotic person, the "omnipotent passivity" (as Gerrans says) already forming their world. Do the patients themselves make the choice, or has all agency already been lost? I think the very concept of "omnipotent passivity" reflects the paradoxical nature of the schizophrenic awareness: perhaps patients with schizophrenia also experience an "omniscient oblivion," where they are in control of the entire world because they *are* the world, but their very selves have diminished to near-nothingness for the same reason that they have become the world. Such a world is like a Möbius strip – there is no beginning or end, because the beginning is the end, and vice versa.

To stay in this state is, not surprisingly, an unsustainable act. In Sass, 1994 book *The Paradoxes of Delusion*, the author examines a very similar kind of paradox with regard to delusion formation and solipsism, which he calls "enslaved sovereign, observed spectator" (quoting Foucault):

It seems that, to remain a solipsist, the solipsist must inevitably waver between two unstable positions. When he concentrates on observing his own experiences, *the solipsistic revelation of centrality disappears* as the I-sense dissolves (thus denying the existence of the solipsistic self). But if he persists in holding to the solipsistic revelation, insisting on its meaningfulness and importance, he necessarily invokes a contradictory presupposition, a world in which at least one other consciousness exists to serve as *an*

alternative to his own consciousness, or to take his own consciousness as an object. The implication is certainly paradoxical: solipsism, strangely enough, seems to demand an other mind. (p. 71, emphasis added)

Of all the manifold layers of paradoxes, this paradox of “observed spectator” seems to be one of the most puzzling. If the solipsist has the ability to create consciousness upon consciousness, then by definition each of these “consciousnesses” would need another one to serve as the alternative and to observe the previous consciousness. This certainly appears to be an infinite regress (coming back to the Möbius strip analogy). The requirement for the other mind will be discussed in detail in Section 6, but here I would like to put forward an argument from a first-person phenomenological perspective about how all these “consciousnesses” could, in theory at least, coexist.

I argue that the solipsistic worldview from the fragmented self of a patient with schizophrenia is a kind of double-awareness (not dissimilar to the idea of “delusion double-bookkeeping”) – a split integrity, a parallel centrality. Delusion double-bookkeeping is a term first coined by Bleuler and adds another layer of paradoxicality by itself – patients with schizophrenic delusions rarely question the veridicality of their thoughts, but neither do they tend to act in accordance with the content of their delusions. Solipsism here, however, goes beyond a simple delusional elaboration; it takes over the patient’s world (quite literally), but the patient is still exposed to the social or shared world. It is indeed paradoxical that patients may view physical reality as products of their own thoughts, but they still communicate with the rest of society (with the exception of severe catatonic states, which are rare nowadays). Some may argue that if patients were really “pure solipsists,” there would be little point in any kind of communication which might imply the acknowledgment of the physical world. But the crucial paradox is that patients are not solipsists by choice. On the one hand, the patient with schizophrenia is aware of the instability of the subjective world, but on the other hand they have to, as Sass argues, hold on to the solipsistic self because if they let go of even this last straw, their entire subjectivity would surely disintegrate. Solipsism, it seems to me, is not a choice of a self-deceiving disorder, but the end product of a long and painful reasoning process (no matter how irrational or biased) that has detached from one’s own agency. As such, the solipsist maintains the unstable parallelism, desperately trying to keep it at equilibrium but at the cost of the whole reaction falling apart. But before that point of disintegration, the solipsistic world has its own attraction. To use Sass’ example, just like the fact that the optic nerve itself is blind, solipsists do not see themselves exist; all they do, and all they have to do, is think. As for the external world, it is something that can be “materialised” at will – maintaining the link between the private-solipsistic and the social-shared worlds is a necessary but involuntary act.

In hyperreflexive states, thinking processes become localized, sometimes vocalized or even materialized as objects of constant observation; in a very crude sense, whenever the schizophrenic solipsist thinks, these thoughts immediately become

the surrounding physical world. There is no experiential “gap” between the formation (in this case, *physical* formation) and the proliferation of thoughts, hence at least to solipsists themselves, their thoughts stay true and pure – to themselves. Any thought born against such a background is almost unavoidably more real than physical reality, for the mere reason that there is simply nothing else to hold on to. Given the high prevalence of noncompliance and poor insight in schizophrenia, it should not be surprising that solipsism is a widespread experience for many patients (Henriksen & Parnas, 2013), as the entire (re)orientation of their world calls not for introspection and common sense (e.g., Stanghellini, 2004), but for thoughts as reality. In addition, a solipsistic attitude can also lead to specific first-rank psychotic symptoms such as thought insertion, which I will discuss in Sections 4 and 5.

Solipsism is, however, not exclusive to the fully formulated stages of schizophrenia, as it has also been recognized as one of the key features of the (very) early phases of a psychotic syndrome, in particular feelings of perplexity in delusional mood. Again, from the European phenomenological tradition, Conrad’s model of “beginning schizophrenia” (Bovet & Parnas, 1993; but also, Mishara, 2010) details five stages: Trema, Apophany and Anastrophe, Apocalyptic, Consolidation, and Residual states. Trema is the initial phase where one’s perceptual and experiential fields become hyper-salient, with a heightened sense of basic affective tension (somewhat like the tension an actor feels before performing on stage). Things may become strange in an inexplicable way; the natural response to such confusion is a search for meaning, that is, until the individual finally reaches a (delusional) conclusion to explain their unusual experiences – hence the revelation in Apophany. This second stage is termed an “aha experience” (Aha-Erlebnis), not dissimilar to a “Eureka moment,” which quite literally offers unprecedented explanations to everything the patient has been experiencing right up until this point.

According to Conrad, the “aha experience” signifies a loss of the patient’s ability “to distance from the experience, to achieve an exchange of reference frames or perspectives, to consider the situation – even temporarily – with the eyes of the others” (Broome et al., 2012, p. 178). The same kind of solipsism is involved, a fundamental failure to adopt someone else’s perspective and a full immersion in one’s own internal world. Apophany and Anastrophe can be seen as two sides of the same coin, which are inseparable and have direct relevance to the sense of solipsism. Conrad explains Anastrophe as “a reflexive turning back on the self in which the universe is experienced as revolving around the self as middle point” (p. 10). The patient’s self appears to be a *passive* middle point of all perceptions and events occurring in the world, where everything is intimately self-referential. Nevertheless, once again this gives rise to a paradox. Although the sense of perplexity during the Trema stage is temporarily alleviated by the delusional Apophany, the Anastrophe may bring back the perplexity because the self is again a passive entity at the mercy of all the confusion caused by a fragmented self-world relationship (see the case study in Humpston & Broome, 2016b). The patient with

schizophrenia as a minimally aware solipsist then becomes highly susceptible to a multitude of seemingly appealing “meanings,” as if the myriad of intangible meanings is calling out to them, rather than potentially choosing the meanings by one’s own volition (for a first-person report, see Hawkes, 2012). This provides fertile ground for the formation and maintenance of many of the “first-rank” positive symptoms of schizophrenia.

4. First-rank symptoms as pathologies of self-awareness

Schneiderian first-rank symptoms (FRS) are a subset of specific symptoms related to the schizophrenic psychopathology considered to have higher diagnostic applicability; albeit far from pathognomonic (Carpenter, Strauss, & Muleh, 1973), in current diagnostic systems they still confer a higher (perceived) specificity to a diagnosis of schizophrenia, especially the *International Classification of Diseases* (ICD-10), where the presence of only *one* of the key FRS over a duration of one month could potentially grant such a diagnosis (Nordgaard, Arnfred, Handest, & Parnas, 2008). The theoretical and practical foundation for this emphasis on FRS may not be as strong as first speculated, however, from a phenomenological perspective, they still remain highly relevant at least, given the nature and commonality within FRS – that is, a breach in the boundary between self and other, internal and external. Some call this a dissolution of “ego-boundaries,” where the patient’s private mental space becomes permeable to external influences (Mullins & Spence, 2003). Basic self-disturbances as the precursors of this permeability clearly have a strong, sometimes extreme impact on the afflicted individual’s awareness and understanding of self, leading to a complete reorientation of existential position (e.g., solipsism).

The breaches of ego-boundaries in FRS manifest as disorders of thought and perception, with a special focus on the *externalization of internal stimuli*, which include third-person auditory verbal hallucinations (AVHs) discussing the patient among themselves, passivity phenomena (of thought and/or action), symptoms such as thought insertion, broadcast, echo and withdrawal, and “bizarre delusions” such as delusions of alien control. I view the solipsistic attitude or lifeworld as the generative experience for this breach of ego-boundaries in schizophrenia; as argued above, in a solipsistic lifeworld, tacit and internal thoughts automatically become the external world with quasi-physical properties, therefore losing the necessity for an ego-boundary.

It is worth noting that I separate thought interference symptoms from bizarre delusions for the reason that I do not necessarily view a delusional elaboration as essential to, say, the context of thought insertion symptoms, which I shall further clarify. Similarly, I separate passivity phenomena from delusions of alien control because I believe the former could occur without forming a delusional explanation. Still, a lack of delusional elaboration or conviction does *not* mean FRS themselves are non-psychotic. It is widely accepted that the FRS are psychotic

symptoms, whereas self-disorders are not (Parnas & Henriksen, 2014); however, FRS do often have non-psychotic precursors in the forms of “as if” experiences. I shall use the cases of AVH, thought insertion (TI), and passivity phenomena as examples to support a more unifying account of FRS.

The definition of a hallucination in *any* modality one could find in standard medical textbooks all seems to converge on the concept of “sensory perception in the absence of corresponding sensory stimuli.” While such a definition may be sufficient for the purpose of classification or even differential diagnosis, it certainly fails to capture the richness and complexity of the subjective experience of hallucinations, neither will it be able to explain why this “sensory perception” is often attributed to an external agent or why the voices (in the case of AVH) seem to have “a mind of their own” or even an individuality associated with them (Wilkinson & Bell, 2016). Indeed, in the context of FRS-related AVH, at least, the voices are “required” to describe the hearer in the third person. If the voices were in the second person, they would not count as FRS, even though second-person AVH may be more common (Nayani & David, 1996). This detached quality in third-person AVH contributes to the realness of the voices, especially when they appear to come from an external locus (although this does not necessarily reflect the underlying pathology; see Copolov, Trauer, & Mackinnon, 2004). However, just like inserted thoughts (see below), surely the hearer of the voices *becomes* aware of the same voices once they enter their mind? Surely there is an external-to-internal permeation of perception? By “permeation” I mean a two-way process of diffusion between what is ego-syntonic and ego-dystonic, where the ego-boundary acts as a key “barrier” between the individual’s subjective world and consensual reality (to use a somewhat more concrete analogy in biology, it is just like the osmotic membrane of a cell).

From subjective reports (for a review of the phenomenology of voice-hearing, see Woods et al., 2014), it does not seem to be the case that the voice-hearer suddenly gains ownership and/or agency over the voices only because they can “hear” them. In fact, the awareness seems to further add to the realness and the non-self qualities of the voices, hence deepening the breach in ego-boundary. Based on the assumption that hallucinations really are sensory perceptions without sensory stimuli, the voice-hearer should at least recognize the voices as not real (as there is clearly no one physically present, for example) instead of becoming more convinced of their reality and externality or even coming up with a (delusional) explanation for the voices’ presence. Maybe the key to solving this contradiction lies not in whether insight is preserved, but in whether hallucinations are always sensory in nature.

Claims like these may seem counterintuitive at first: it has to be that voices are called “voices” because they are heard! Why would the patient report voice-hearing if they are not audible? But perhaps, as radical as it may sound, in many cases of voice-hearing the patient *assigns* auditory qualities to their experiences because such experiences often go beyond what language can describe. If someone

experiences “the sense of being spoken to or communicated with,” he or she would naturally *think* the communication is verbal even without actual words. Of course, such cases of “soundless voices” do not encompass *all* voice-hearing experiences; in fact, some of them are indeed clearly auditory as well (and these can be indexed as activation in language production and processing areas in the brain). But whether the auditory quality is a primary or a secondary feature of AVH is open to debate, I think, because the act of hearing (or indeed, any kind of sensory perception) would stay silent until the point at which the hearer communicates such a phenomenon to another. In other words, although this may sound obvious, we only assume someone else can hear, see or taste things because we can do the same. We can never fully be certain this is true, however, until this other person tells us so. By the process of telling there is inevitably an experiential gap; by the act of transforming experience into words there must be a more second-order awareness, rather than accurately reflecting the raw “material” of experience. Qualitative researchers have indeed found support in first-person reports of the phenomenology of AVH that a large proportion of all AVH is not sensory (at least as defined in a physiological sense) at all (Jones & Luhrmann, 2016; Jones & Shattell, 2016; Rosen et al., 2016).

Some AVHs are more akin to thought insertion (e.g., Humpston & Broome, 2016a; Raballo, 2017), a notion which is also reflected in Billon, 2013 paper, where he states,

Inserted thoughts are similar to alien voices in many respects ... voices are vehicles of thought which are not phenomenally conscious but of which the subject is aware ... inserted thoughts and voices would *differ in degree rather than in kind*. Inserted thoughts would be inner voices, and alien voices would be outer inserted thoughts. (p. 309, emphasis added)

This difference in degree lies not in the locality but in the level or “amount” of agency and ownership one has over one’s experiences. Because one is aware of something it does not necessarily make this “something” a part of one’s subjectivity; similarly, experiencing something does not always bring the experience under one’s conscious control.

Some may be inclined to argue, however, that if experiences like AVH or inserted thoughts really are more salient than everyday reality, as I speculate, why wouldn’t they become a part of the experiencer’s subjectivity, given the enhanced salience? I do not think heightened salience always equates to increased *self-awareness*; indeed, it may well increase the awareness of such salience *in general*, but it is not experienced as a part of one’s self, especially when its contents appear ego-dystonic. Some patients with schizophrenia may actively “push away” the voices or thoughts as not their own, due to the misfit with their values, identity, and opinions, but this is more in a narrative sense of self rather than the minimal level of awareness of which I speak now. It is perhaps more likely that there is little second-order judgment involved in the first instance (see Section 5 below), even in the face of an extremely salient *external* event – the patient with

schizophrenia has never been given the opportunity to assign whether the stimulus is internal or external because it is already decided for him or her even before the stimulus reaches a conscious status. Of course, the patient might come up with many different explanations and utilize all kinds of (meta)cognitive strategies to make sense of the experience, but this occurs *after* the raw stimulus has entered awareness. Whether it is a hallucinated voice or an inserted thought (or anything in-between), they all require a mind in which they can be contained, experienced, and expressed. Such experiences cannot be compared to communications between the patient and another physical entity in the external world; even though the thoughts and voices may also appear to possess their own mentality to qualify as an “other agent,” their presence is not a physical one.

For the patient with schizophrenia as a solipsist, however, physicality or corporeality is not a prerequisite for existence. Thoughts are concrete, as they make up the mental world and at the same time become the world; consciousness is nothing but the ephemeral material that creates an eternal stream of thoughts. Perhaps, just perhaps, whether the thoughts are inserted, whether the voices are sensory, and all these questions, do not even matter for the solipsistic mind because there is no such thing as “other” – while everything can also be viewed as “other,” the centrality of the solipsistic mind and its instability, to take on another perspective, have already determined that other *is* self, and vice versa. The ego-boundary is permeable to the extent of dissolution.

Against such a background of fragmented self-awareness, anything other than thoughts may seem redundant. Nothing else exists as either a precursor to or a consequence of one’s thinking processes, and as such, actions, emotions, and behaviors would all appear unnecessary to say the least, if not completely useless. But thoughts are still action-guiding, and one still must act in order to function in the “real” physical world (after all, in order to continue thinking the solipsistic patient has to stay alive and needs a body!), and this creates another dilemma for the patient. To relinquish the will to act requires a will, a decision-making process in itself; in a world made of thoughts alone, the only will that exists is the patient’s own, so by definition, it must be the only *free* will of which the patient is aware. However (as Sass points out), to maintain solipsism one would strangely require the observation of another mind. Otherwise one would never be able to tell that their will is the only will – again, an infinite regress. But in order to find another mind, one has to first admit that the position of solipsism is unsustainable, if not invalid. This is perhaps the most confusing and painful predicament of a psychotic mind: a mind forever wandering in solitude, yet such solitude only exists with another. Indeed, it is a loneliness defined by multiple “consciousnesses,” and as a result, the psychotic mind is never alone. The action-guiding nature of thought becomes an otherness, hence the feelings of passivity, as if one has been taken over by this other agent *whilst* maintaining the solipsistic awareness.

None of these phenomena, I argue, actually *require* a delusional elaboration. The paradoxical awareness remains real so long as the patient remains aware of

only the egocentricity, but unaware of the non-physicality, of their own thinking. In other words, the patient's entire existence revolves around thinking and not the physical world. Thinking, as it happens, is the most real occurrence an individual with psychosis could possibly encounter and the most tangible entity he or she could grasp. Fortunately, or unfortunately still, the solipsist cannot always achieve the status of being alone with one's thoughts. In a different, or even separate, reality (as experienced by the psychotic mind), their awareness is inevitably influenced by other "real" people in their lives – this time in a more metacognitive sense.

5. Feeling vs. judgment of awareness

In this section, I will discuss the notions of agency and ownership and how the paradoxicality of a solipsistic self-awareness can act as a destructive force to both phenomena. When describing self-awareness, senses of agency and ownership frequently come to the forefront. Studies of agency and ownership have mostly focused on those of motor acts, with "agency" denoting the sense that *I* am the initiator of my action, whereas "ownership" indicates a sense of bodily awareness that *my* limbs make the movement. These two concepts, in the case of voluntary actions, are indistinguishable and only come apart in the case of passive or involuntary actions (Synofzik, Vosgerau, & Newen, 2008a), where the sense of agency diminishes (i.e., I no longer initiate the action), but the sense of ownership remains intact (i.e., it is still my limbs that are moved by someone else). A fundamental question is, however, does the *feeling* that it is my limb initiating the action always leads to the *knowledge* that I am the initiator of the action? Agency, it seems, is multifactorial (Synofzik, Vosgerau, & Newen, 2008b), with proprioceptive and conceptual components; similarly, the feeling of ownership can also be differentiated from the judgment of ownership.

Such a distinction is very useful when studying actions and complements a variety of neurobiological and neurocognitive models of motor control (e.g., Frith's Comparator Model), but may nevertheless appear insufficient when applied to thinking processes. When one speaks of "self-awareness", it certainly does not limit itself to the awareness of actions only. To me, awareness of one's own thoughts forms the basis of all other types of awareness, including that of (voluntary) actions, because an intention to move is obviously in the form of a thought at first. Some theorists have proposed that thoughts are the products of motor processes after all (e.g., Campbell, 1999) and that thinking, like motor acts, also has its own associated feeling and judgment of agency, although others argue otherwise (e.g., Vicente, 2014). Gerrans (2015) views inner speech as a kind of imaginary action, but also states that "speech, including inner speech, *expresses* thoughts but it is not thought itself" (p. 297), and in cases of thought insertion (Gerrans calls the latter "delusions" of thought insertion, but I disagree that all inserted thoughts must have a delusional elaboration associated with them or reach delusional intensity

– some may well be simply “as if” experiences), the loss of thought agency only explains the passivity of thinking but not the attribution to an external source.

It sounds to me as if the externality is part and parcel of the passivity; however, I think the external attribution (i.e., delusional elaboration) only occurs *after* the passivity of thinking takes hold and is the end result of an instinctive *search for meaning* rather than the inevitable consequence that “completes” the experience of thought insertion. Therefore, the awareness (or the lack thereof) in alien thoughts, or even voices, is a duplex phenomenon consisting of a generative experience which often (but not always) leads to a delusional explanation. I do not agree that because the inserted thoughts occur within a mind they will have to be owned by the mind in which they are found (my argument is in line with that by Bortolotti & Broome, 2009), especially when the entire ipseity is engulfed by solipsism and there is in essence no boundary between the mind, where the thoughts are found, and the “external origin” from where they appear.

The pre-reflective self-awareness is a concept interchangeable with ipseity or minimal self (Parnas & Handest, 2003), which is defined by the self as the immediate *subject* of any given experience from a first-person perspective (Legrand, 2007; Gallagher, 2000), whereas a reflective awareness is linked to the concept of “narrative self” and entails deliberative evaluation of one’s mental states, such as the process of introspection influenced by social values. As mentioned above, reflective self-awareness is built upon the foundation of pre-reflective self-awareness and can only be made explicit because the latter layer of selfhood remains tacit and implicit.

Gallagher (2014) emphasizes that the concepts of agency and ownership are twofold, with the “sense” of agency/ownership (pre-reflective) separable from the “attribution” of agency/ownership (reflective) which is very similar to the feeling vs. judgment of agency/ownership that Synofzik and colleagues propose: the former refers to feeling and experience, whereas the latter denotes realization and judgment. Gallagher also agrees that spatiality is not a strong prerequisite for ownership, however, and he offers a counterargument to that of Bortolotti and Broome (2009), suggesting that problems with ownership can all be linked back to those of agency.

Nevertheless, a lack or denial of ownership is not exactly the same as a damaged sense of ownership, and an all-or-none distinction is at best an over-simplification of a highly complex phenomenon. The very observation that the inserted thoughts *originated* from an external source (i.e., not from the patient) indicates that the agency or authorship has diminished. This does not necessarily mean that the patient cannot be introspectively or reflectively aware of such external thoughts as some sort of meta-representation (this may be seen as a lack of pre-reflective but not reflective ownership, and not the other way around). Once again, awareness does not have to entail subjectivity.

I say this because, while the experiencing individual is aware of the moment a certain intrusion occurs in their mind, such intrusion is not an integral part

of their ipseity. When a patient complains, for example, “I have thoughts being implanted into *my* mind” or “I hear voices (but no one else is present),” isn’t it just another paradox that violates the very nature of thinking and perception? Paradoxical, indeed; the patient does keep using the first-person pronoun “I” and its possessive form “my” which should at least denote *some* level of self-attribution, but the patient is also adamant that the causal agents of these thoughts and voices are *not* himself or herself. But the only way to state that the experience is non-self is by using self-related attributive pronouns! One way to potentially better understand (not to resolve) this paradox is perhaps to view the first-person pronouns not in a literal sense, but as mere metaphors of a given mental event taking place in *any* mind (not just one’s own mind), due to the constraints of language. There is no other means by which one could possibly describe a thought apparently found in one’s mind that one did not think, at least in English; one’s experience is always denoted by the first-person pronoun. In pathological cases, however, such usage does not necessarily mean the patient feels or even admits the experience is his or her own, but the judgment of ownership (or reflective ownership) is almost forced upon the patient when expressing the experience to another. Yet the judgment of ownership by definition implies willed attribution, so it cannot theoretically be “forced” upon anyone ... where does the metaphor end and where does one’s “real” judgment begin?

This “real” judgment needs to be deliberative and involves some inferential process, and not just by simply using “I”. Nevertheless, from a solipsistic attitude, the “I” is the world and there is simply no need for any judgment about reality – everything is simultaneously real and unreal. Certainly, such an attitude will more often than not lead to delusional consequences and the further the patient dwells on this experience, the more ingrained the delusional systems become. It almost seems that a bizarre experience requires an equally bizarre explanation *by nature*. What happens *after* the patient becomes aware of these anomalous experiences is not a judgment of *whether* the experience is generated by, or even belongs to, the patient or someone else, but *why* it has taken place in his or her mental space.

Given the solipsistic position discussed above, perhaps the patient’s mental space is as good as any single mental space, because there is only one such space, but it does not offer the answer to this perpetual “why.” A feeling of non-self is not incompatible with a judgment of self-attribution by the use of words, because they all happen in the same primordial soup of thoughts and perceptions. Even the concept of insight, a concept valued by clinicians as *the* form of awareness that signals a return to normality, is a non sequitur. No one needs the insight into the “abnormal nature” of one’s experiences because the “symptoms” are one’s only self-experiences, and as such the insight into abnormality is just the insight into one’s ipseity. It may be true that one’s illness does not “define” one’s individuality or identity, but the latter forms of selfhood are of a far more narrative and autobiographical, rather than a basic and minimal, sense of self.

The narrative self, I emphasize, is built upon the minimal self. It may not be disrupted or even damaged to the same extent, but its development will either come to a halt or become distorted in psychosis. When one is no longer aware of the boundary between self and other, it will be extremely difficult if not impossible for a socially defined, optimally functioning self to prosper. Without the common-sensical “grip” of the world, (a lack of) feelings of agency and ownership often leads to judgments that are not shared or accepted by the physical world (in fact, a loosened “grip” is an additional component to hyperreflexivity and diminished self-affection; Sass & Parnas, 2003; Stanghellini, 2009). By common sense, I am not speaking of its definition as the ability to act, think, and perceive according to a collection of knowledge obtained from past experience with the expectation that everyone should at least have some of it; I am speaking of common sense as the taken-for-granted immersion in the world and relation with the other inhabitants of the same world. In this case, common sense is something one *must* have in order to construct a coherent self-experience and is only damaged in psychopathological states. In a way, this definition of common sense is perhaps more akin to the basic awareness that one is an action-guiding agent whose agency is only validated when considered relative to another agent with such an ability.

Whether thinking is also a motor act is not truly relevant to the argument here. Anything that originates from one’s mind is reflected in that of another, which is a kind of “reverse-solipsism”; but solipsism cannot be reversed because there is no other perspective to take. It may sound like a dramatic exaggeration, as some might argue, but the infinite loop of paradoxes is evident. Without solutions, these paradoxes occupy the core of what is left of one’s barely functioning ipseity – and the desperate efforts to keep one’s “sanity” intact push one deeper into the abyss of simply being *aware*.

6. The paradoxical self

So far, I have discussed various aspects of the schizophrenic psychopathology that in my opinion are best viewed as paradoxes of self-awareness driven by a solipsistic lifeworld; for the individual with schizophrenia, however, consciousness itself may just become another unsolvable and meaningless paradox in the most extreme case. Granted, being conscious forms the basis of being aware of one’s own consciousness, but what if such a consciousness can no longer constitute the building blocks of self-awareness? I would like to come back to Sass’ book *The Paradoxes of Delusion*, where he quotes Schopenhauer:

The twofold nature of consciousness ... the antinomy whereby consciousness, the supporter of the world, the universal condition of all that appears ... every individual, completely vanishing and reduced to nothing in a boundless world, nevertheless makes himself the centre of the world. (pp. 81–82)

It is as if by one’s own psychological annihilation one is also rebuilt and reborn into the “observed spectator” or the “omnipotent passivity” to which Sass and Gerrans

refer, which is also a notion that resonates with that of R. D. Laing (Ratcliffe & Broome, 2012). For the patient with schizophrenia, a perpetual state of being observed and being passive almost appears a small price to pay in exchange for omnipotence, because even the observer is nothing but a creation (if not an extension) of the patient's own mind. The merge between action and passivity, oblivion and omniscience, is perhaps *the* final paradox for the schizophrenic mind. Yet it is also a state of equilibrium, a carefully balanced stasis where the patient is simultaneously the owner and the owned, the subject and the object. As Sass repeatedly points out, strangely, the paradox of solipsism is that it needs an "other mind" for it to be valid, if it is ever valid. But by definition, solipsism is self-assuring and self-validating because consciousness is the entirety of this internal creation that one calls reality. In this sense, reality ends when one dies; reality only began when one first became conscious. This may ring true to a certain degree, however, because epistemically it is impossible to know for absolute certainty that reality will continue after one's consciousness ends, but because we are aware of other minds, we are assured that reality will likely continue, given that it will still be perceived by these other minds.

I think, perhaps, the patient with schizophrenia takes up the solipsistic position not by personal choice but because his or her self is "calling out" for such a position in order to remain an integrated construct. The self has to, after all, preserve *itself*; and as such, when the self is threatened with potentially permanent disintegration by schizophrenic self-disturbances, it is almost a protective mechanism to enforce the centrality of the self, as if an undamaged self is still in charge. This goes beyond a belief or even a defense mechanism; sufferers do not have to *believe* what their minds tells them or defend their egos with grandiose ideals, sufferer simply have to be *alive* – as long as they are alive, the self can continue the cycle of solipsism and maintain the fragile stasis while entrapped in endless paradoxes. In other words, the initial psychological annihilation is only an illusion, a smoke screen to react to the threat of disintegration. The fact is that the self is held together by a new set of rules, the rules of a minimally aware solipsist.

As tempting and effective as this "solution" might be, however, the solipsist position is challenged, or even further, threatened by other minds – the very minds at the same time demanded by the solipsist to help sustain his or her centrality. Solipsism certainly sounds like a delusion (belief or not), but to me it is far more than an irrational method of inference. I say this because no (active) inference is needed in order to adopt the solipsist position; it is the final straw to preventing the dissolution of ipseity, a last resort to keep the self from collapsing. It might be a dangerous and desperate "cure" but it is certainly the lesser of the two evils (the other being a complete shutdown of one's psychological functions). This is not the same as incorrigibility in the maintenance of delusions, but a default "parallel world" to which the self returns when facing the ultimate threat – a position of nothingness, yet also a position of infinite possibilities. The self cannot be

annihilated if it does not exist in the first place, or at least it does not exist where the threat is any more.

7. Theoretical and empirical implications

Acknowledging the paradoxical nature of self-awareness in schizophrenia has a number of theoretical and empirical, sometimes clinical, implications. The paradoxes I have discussed here are clearly multifactorial and complex, but they should not act as a barrier to understanding schizophrenia as a disorder of self-awareness. However, are such paradoxes specific to schizophrenia? What about other disorders of the self, such as dissociative identity disorder or depersonalization disorder (see Sass, Pienkos, Nelson, & Medford, 2013 for a detailed discussion)? It is often recognized in the latter cases that the self-disturbances are not delusional, that is, not psychotic, and reality testing remains intact; but if the disordered self in schizophrenia really is not a delusional one as I argue, would this render the difference between schizophrenia and dissociation negligible? I think one needs to be very careful when differentiating the level of selfhood affected in these two disorders: the ipseity (a narrower and more basic definition than selfhood) is fragmented like shattered glass in schizophrenia, and solipsism acts as the adhesive trying to hold the pieces together, but the marks remain, whereas the self in dissociation has plasticity like beads of mercury which can come together or fall apart without leaving a mark (an analogy used by Scharfetter, 2008 which is also Laingian). In other words, the self in dissociation does not need this “adhesive” and therefore is not solipsistic. As a result, the paradoxes associated with solipsism will not apply to dissociation. Nevertheless, empirical studies need to be carried out in order to identify and measure the potential experiential differences and similarities, as well as perhaps the neurobiological substrates, between the two disorders.

Research efforts in neurobiology have in the past been considered incompatible with those in, for example, social psychology and phenomenology, but this has started to change towards multidisciplinary collaborations. While mental events may not be defined simply as epiphenomena from brain processes, it is needless to say that the former cannot possibly occur without the latter. Biological research by itself is insufficient, however, to disentangle all the complexities and nuances of say, ipseity without being informed by phenomenology, and phenomenological research cannot achieve its full meaningfulness without establishing neurological bases. Even in the clinical setting, a heavy bias toward one or the other approach can do more harm than good. Solipsism, for example, may have beneficial properties as a protective mechanism against total fragmentation of the self, at least initially; if the clinician treats this as nothing but a delusion to be eliminated by antipsychotic medication, the only shield against psychological annihilation (albeit a maladaptive one) is taken away, which may drive the patient into deeper despair. On the other hand, if the clinician is determined to not use any kind of biomedical treatment, psychotherapy alone may not be effective against the florid

psychosis as positive symptoms develop. Extreme care and balance are therefore called for in order to manage the subtler symptoms of schizophrenia, especially in the early stages. What should be placed first and foremost, however, is the clinician's willingness to listen (even if they cannot understand) to what the patient tells them, as this forms the very basis of any kind of therapeutic alliance (Parnas & Henriksen, 2014).

8. Conclusion

To conclude, in this article I have discussed various aspects of schizophrenic symptoms as disorders of self-awareness, focusing on their paradoxical nature and how they might contribute to the formation of more florid manifestations (such as auditory-verbal hallucinations and thought insertion). It may appear that I have not provided a solution to the paradoxes; however, the reality of the matter is that there is no such solution. But this does not have to be a negative or unfortunate outcome of a schizophrenic awareness. The mysteries of consciousness, pathological in this case, will continue to attract theorists, experimenters, and clinicians, despite perhaps knowing that there is no final point of unification for all explanations. Nevertheless, I believe that if one keeps furthering their understanding of the self, they will eventually reach the point where they can *understand* another human being's suffering and take actions to alleviate it. Solutions, perhaps, will then emerge, not as attempts to resolve the paradoxes of awareness, but as genuine acts of understanding in order to ease the pain caused by such paradoxes.

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References

- Ashe, P. C., Berry, M. D., & Boulton, A. A. (2001). Schizophrenia, a neurodegenerative disorder with neurodevelopmental antecedents. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 25(4), 691–707.
- Billon, A. (2013). Does consciousness entail subjectivity? The puzzle of thought insertion. *Philosophical Psychology*, 26(2), 291–314.
- Bortolotti, L., & Broome, M. (2009). A role for ownership and authorship in the analysis of thought insertion. *Phenomenology and the Cognitive Sciences*, 8(2), 205–224.
- Bovet, P., & Parnas, J. (1993). Schizophrenic delusions: A phenomenological approach. *Schizophrenia Bulletin*, 19(3), 579.
- Broome, M. R., Harland, R., Owen, G. S., & Stringaris, A. (Eds.). (2012). *The Maudsley reader in phenomenological psychiatry*. Cambridge: Cambridge University Press.

- Campbell, J. (1999). Schizophrenia, the space of reasons, and thinking as a motor process. *The Monist*, 82(4), 609–625.
- Carpenter, W. T., Strauss, J. S., & Muleh, S. (1973). Are there pathognomonic symptoms in schizophrenia?: An empiric investigation of Schneider's first-rank symptoms. *Archives of General Psychiatry*, 28(6), 847–852.
- Cermolacce, M., Naudin, J., & Parnas, J. (2007). The “minimal self” in psychopathology: Re-examining the self-disorders in the schizophrenia spectrum. *Consciousness and Cognition*, 16(3), 703–714.
- Copolov, D., Trauer, T., & Mackinnon, A. (2004). On the non-significance of internal versus external auditory hallucinations. *Schizophrenia Research*, 69(1), 1–6.
- Fusar-Poli, P., Bonoldi, I., Yung, A. R., Borgwardt, S., Kempton, M. J., Valmaggia, L., ... McGuire, P. (2012). Predicting psychosis: Meta-analysis of transition outcomes in individuals at high clinical risk. *Archives of General Psychiatry*, 69(3), 220–229.
- Gallagher, S. (2000). Philosophical conceptions of the self: Implications for cognitive science. *Trends in Cognitive Sciences*, 4(1), 14–21.
- Gallagher, S. (2014). Relations between agency and ownership in the case of schizophrenic thought insertion and delusions of control. *Review of Philosophy and Psychology*, 6, 865–879.
- Gerrans, P. (2014). *The measure of madness: Philosophy of mind, cognitive neuroscience, and delusional thought*. Cambridge, MA: MIT Press.
- Gerrans, P. (2015). The feeling of thinking: Sense of agency in delusions of thought insertion. *Psychology of Consciousness: Theory, Research, and Practice*, 2(3), 291–300.
- Hawkes, E. (2012). Making meaning. *Schizophrenia Bulletin*, 38(6), 1109–1110.
- Henriksen, M. G. (2013). On incomprehensibility in schizophrenia. *Phenomenology and the Cognitive Sciences*, 12(1), 105–129.
- Henriksen, M. G., & Parnas, J. (2013). Self-disorders and schizophrenia: A phenomenological reappraisal of poor insight and noncompliance. *Schizophrenia Bulletin*, 40(3), 542–547.
- Humpston, C. S., & Broome, M. R. (2016a). The spectra of soundless voices and audible thoughts: Towards an integrative model of auditory verbal hallucinations and thought insertion. *Review of Philosophy and Psychology*, 7(3), 611–629.
- Humpston, C. S., & Broome, M. R. (2016b). Perplexity. In G. Stanghellini & M. Aragona (Eds.), *An experiential approach to psychopathology: What is it like to suffer from mental disorders* (pp. 245–264). London: Springer.
- Hur, J. W., Kwon, J. S., Lee, T. Y., & Park, S. (2014). The crisis of minimal self-awareness in schizophrenia: A meta-analytic review. *Schizophrenia Research*, 152(1), 58–64.
- Johnson, A. (2013). How understanding neuroscience helps me get unstuck. *Schizophrenia Bulletin*, 41(3), 544–545.
- Jones, N., & Luhrmann, T. M. (2016). Beyond the sensory: Findings from an in-depth analysis of the phenomenology of “auditory hallucinations” in schizophrenia. *Psychosis*, 8(3), 191–202.
- Jones, N., & Shattell, M. (2016). Not what the textbooks describe: Challenging clinical conventions about psychosis. *Issues in Mental Health Nursing*, 37(10), 769–772.
- Legrand, D. (2007). Pre-reflective self-as-subject from experiential and empirical perspectives. *Consciousness and Cognition*, 16(3), 583–599.
- Lieberman, J. A. (1999). Is schizophrenia a neurodegenerative disorder? A clinical and neurobiological perspective. *Biological Psychiatry*, 46(6), 729–739.
- Mishara, A. L. (2010). Klaus Conrad (1905–1961): Delusional mood, psychosis, and beginning schizophrenia. *Schizophrenia Bulletin*, 36(1), 9–13.
- Mishara, A., Bonoldi, I., Allen, P., Rutigliano, G., Perez, J., Fusar-Poli, P., & McGuire, P. (2016). Neurobiological models of self-disorders in early schizophrenia. *Schizophrenia Bulletin*, 42(4), 874–880.

- Mullins, S., & Spence, S. A. (2003). Re-examining thought insertion. *The British Journal of Psychiatry*, 182(4), 293–298.
- Nayani, T. H., & David, A. S. (1996). The auditory hallucination: A phenomenological survey. *Psychological Medicine*, 26(1), 177–189.
- Nelson, B., Thompson, A., Chanen, A. M., Amminger, G. P., & Yung, A. R. (2013). Is basic self-disturbance in ultra-high risk for psychosis ('prodromal') patients associated with borderline personality pathology? *Early Intervention in Psychiatry*, 7(3), 306–310.
- Nelson, B., Thompson, A., & Yung, A. R. (2012). Basic self-disturbance predicts psychosis onset in the ultra high risk for psychosis "prodromal" population. *Schizophrenia Bulletin*, 38(6), 1277–1287.
- Nordgaard, J., Arnfred, S. M., Handest, P., & Parnas, J. (2008). The diagnostic status of first-rank symptoms. *Schizophrenia Bulletin*, 34(1), 137–154.
- Nordgaard, J., & Parnas, J. (2014). Self-disorders and the Schizophrenia spectrum: A study of 100 first hospital admissions. *Schizophrenia Bulletin*, 40(6), 1300–1307.
- Parnas, J., & Handest, P. (2003). Phenomenology of anomalous self-experience in early schizophrenia. *Comprehensive Psychiatry*, 44(2), 121–134.
- Parnas, J., Møller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of anomalous self-experience. *Psychopathology*, 38(5), 236–258.
- Parnas, J., & Sass, L. A. (2001). Self, solipsism, and schizophrenic delusions. *Philosophy, Psychiatry, & Psychology*, 8(2), 101–120.
- Parnas, J. (2011). A disappearing heritage: The clinical core of schizophrenia. *Schizophrenia Bulletin*, 37(6), 1121–1130.
- Parnas, J., Raballo, A., Handest, P., Jansson, L., Vollmer-Larsen, A., & Saebye, D. (2011). Self-experience in the early phases of schizophrenia: 5-Year follow-up of the Copenhagen Prodromal study. *World Psychiatry*, 10(3), 200–204.
- Parnas, J., & Henriksen, M. G. (2014). Disordered self in the schizophrenia spectrum: A clinical and research perspective. *Harvard Review of Psychiatry*, 22(5), 251–265.
- Payne, R. (2012). Night's end. *Schizophrenia Bulletin*, 38(5), 899–901.
- Raballo, A. (2017). From perception to thought: A phenomenological approach to hallucinatory experience. *Schizophrenia bulletin*, 43(1), 18–20.
- Ratcliffe, M., & Broome, M. (2012). Existential phenomenology, psychiatric illness and the death of possibilities. In S. Crowell (Ed.), *Cambridge companion to existentialism* (pp. 361–382). Cambridge: Cambridge University Press.
- Rosen, C., Jones, N., Chase, K. A., Gin, H., Grossman, L. S., & Sharma, R. P. (2016). The intrasubjectivity of self, voices and delusions: A phenomenological analysis. *Psychosis*, 8(4), 357–368.
- Sass, L. A. (1994). *The paradoxes of delusion: Wittgenstein, Schreber, and the schizophrenic mind*. Ithaca, NY: Cornell University Press.
- Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, 29(3), 427–444.
- Sass, L., Pienkos, E., Nelson, B., & Medford, N. (2013). Anomalous self-experience in depersonalization and schizophrenia: A comparative investigation. *Consciousness and Cognition*, 22(2), 430–441.
- Scharfetter, C. (2008). Ego-fragmentation in schizophrenia: A severe dissociation of self-experience. In A. Moskowitz, I. Schafer, & M. J. Dorahy (Eds.), *Psychosis, trauma and dissociation: Emerging perspectives on severe psychopathology* (pp. 51–64). New York, NY: John Wiley & Sons Ltd.
- Sestito, M., Parnas, J., Maggini, C., & Gallese, V. (2017). Sensing the worst: Neurophenomenological perspectives on neutral stimuli misperception in schizophrenia spectrum. *Frontiers in Human Neuroscience*, 11, 269.

- Sestito, M., Raballo, A., Umiltà, M. A., Leuci, E., Tonna, M., Fortunati, R., ... Gallese, V. (2015). Mirroring the self: Testing neurophysiological correlates of disturbed self-experience in schizophrenia spectrum. *Psychopathology*, 48(3), 184–191.
- Škodlar, B., Henriksen, M. G., Sass, L. A., Nelson, B., & Parnas, J. (2013). Cognitive-behavioral therapy for schizophrenia: A critical evaluation of its theoretical framework from a clinical-phenomenological perspective. *Psychopathology*, 46(4), 249–265.
- Stanghellini, G. (2004). *Disembodied spirits and deanimated bodies: The psychopathology of common sense*. New York, NY: Oxford University Press.
- Stanghellini, G. (2009). Embodiment and schizophrenia. *World Psychiatry*, 8(1), 56–59.
- Synofzik, M., Vosgerau, G., & Newen, A. (2008a). I move, therefore I am: A new theoretical framework to investigate agency and ownership. *Consciousness and Cognition*, 17(2), 411–424.
- Synofzik, M., Vosgerau, G., & Newen, A. (2008b). Beyond the comparator model: A multifactorial two-step account of agency. *Consciousness and Cognition*, 17(1), 219–239.
- van Duppen, Z. (2016). The phenomenology of hypo- and hyperreality in psychopathology. *Phenomenology and the Cognitive Sciences*, 15(3), 423–441.
- Vicente, A. (2014). The comparator account on thought insertion, alien voices and inner speech: Some open questions. *Phenomenology and the Cognitive Sciences*, 13(2), 335–353.
- Vitasola, F. (2013). Why am I studying neuroscience when I have a disease science can't explain: A brief synopsis from my book *Life Insane: My Memoir—Making of the Madman* (Case Number: TXu001850659, US Copyright Office, Date: February 2, 2013). *Schizophrenia Bulletin*, 41(5), 1013–1015.
- Wilkinson, S., & Bell, V. (2016). The representation of agents in auditory verbal hallucinations. *Mind & Language*, 31(1), 104–126.
- Woods, A., Jones, N., Bernini, M., Callard, F., Alderson-Day, B., Badcock, J. C., ... Krueger, J. (2014). Interdisciplinary approaches to the phenomenology of auditory verbal hallucinations. *Schizophrenia Bulletin*, 40(Suppl 4), S246–S254.
- Zipursky, R. B., Reilly, T. J., & Murray, R. M. (2013). The myth of schizophrenia as a progressive brain disease. *Schizophrenia Bulletin*, 39(6), 1363–1372.